

CLAIMS

What is claimed is:

1. In a graphical user interface for a computer, a method of arranging objects to be displayed within windows forming the graphical user interface, the method comprising:
  - 5 defining attributes of the objects; and
  - arranging the objects as a function of the defined attributes of the respective objects.
- 10 2. The method of claim 1 wherein defining attributes of the objects comprises assigning attributes to the objects to define hierarchical relationships among the objects.
3. The method of claim 2 wherein assigning attributes to the objects comprises assigning attributes to the objects responsive to user inputs.
- 15 4. The method of claim 1 wherein the objects include widgets.
5. The method of claim 4 wherein the widgets include buttons, dialog boxes, pop-up windows, pull-down menus, icons, scroll bars, resizable window edges, progress indicators, selection boxes, windows, tear-off menus, menu bars, toggle switches, and forms.
- 20 6. The method of claim 1 wherein one of the attributes assigned to each object comprises a style attribute and wherein the objects are arranged within the window according to the assigned style attributes.
7. The method of claim 1 wherein each window further comprises a plurality of containers and wherein the method comprises defining attributes of

objects within each container and arranging the objects within the container as a function of the defined attributes.

8. The method of claim 7 further comprising defining a style attribute for each container and arranging the objects within the container as a function of this defined style attribute.

9. The method of claim 7 further comprising defining attributes of each container to be displayed within a given window and arranging the containers within the window as a function of these attributes.

10. The method of claim 1 further comprising:  
after arranging the objects, deleting selected ones of the objects in the window; and  
after deleting the selected ones of the objects, once again arranging the objects as a function of the defined attributes of the remaining objects.

11. The method of claim 1 wherein defining attributes of the objects comprises identifying relationships among objects defining attributes of the objects responsive to user inputs.

12. In a graphical user interface for a computer, a method of arranging widgets being displayed within windows forming the graphical user interface, the method comprising:  
selecting widgets to be placed within respective windows;  
assigning characteristics to the selected widgets that establish relationships among the widgets; and  
arranging the widgets within each window as a function of the assigned characteristics.

13. The method of claim 12 wherein the widgets include buttons, dialog boxes, pop-up windows, pull-down menus, icons, scroll bars, resizable window edges, progress indicators, selection boxes, windows, tear-off menus, menu bars, toggle switches, and forms.

5 14. The method of claim 12 further comprising wherein assigning characteristics of the selected widgets comprises assigning characteristics to the selected widgets to define hierarchical relationships among the widgets.

15 15. The method of claim 12 wherein one of the characteristics assigned to each widget comprises a style characteristic and wherein the widgets are arranged within the window according to the assigned style characteristics.

16. The method of claim 12 wherein each window further comprises a plurality of containers and wherein the method comprises assigning characteristics of selected widgets within each container and arranging the widgets within each container as a function of the defined characteristics.

15 17. The method of claim 16 further comprising assigning characteristics of each container to be displayed within a given window and arranging the containers within the window as a function of these characteristics.

18. A computer-readable medium having stored thereon a layout  
builder program for arranging objects to be displayed within widows of a graphical  
20 user interface by performing the operations of:  
defining attributes of the objects; and  
arranging the objects as a function of the defined attributes of the  
respective objects.

25 19. The computer-readable medium of claim 18 wherein the computer-readable medium comprises an optical disk.

20. The computer-readable medium of claim 19 wherein the optical disk comprises a compact disk.

5 21. The computer-readable medium of claim 18 wherein defining attributes of the objects comprises assigning attributes to the selected objects to define hierarchical relationships among the objects.

22. The computer-readable medium of claim 18 wherein the selected objects include widgets.

10 23. The computer-readable medium of claim 22 wherein the widgets include buttons, dialog boxes, pop-up windows, pull-down menus, icons, scroll bars, resizable window edges, progress indicators, selection boxes, windows, tear-off menus, menu bars, toggle switches, and forms.

15 24. The computer-readable medium of claim 18 wherein each window further comprises a plurality of containers and wherein the method comprises defining attributes of selected objects within each container and arranging the objects within each container as a function of the defined attributes.

25. The computer-readable medium of claim 24 further comprising defining attributes of each container to be displayed within a given window and arranging the containers within the window as a function of these attributes.

20 26. The computer-readable medium of claim 18 wherein one of the attributes assigned to each object comprises a style attribute and wherein the objects are arranged within the window according to the assigned style attributes.

25 27. A computer system, comprising:  
an input device;  
an output device; and

computer circuitry coupled to the input and output devices and operable to execute a layout builder program, the layout builder program being operable to define attributes of objects to be displayed within a window of a graphical user interface and further operable to arrange the objects within the  
5 window as a function of the defined attributes of the respective objects

28. The computer system of claim 27 further comprising data storage devices coupled to the computer circuitry.

29. The computer system of claim 27 wherein the layout builder program is operable in response to user inputs from the input device to assign  
10 attributes to the objects that define hierarchical relationships among the objects.

30. The computer system of claim 27 wherein the layout builder program is operable to assign a style attribute to each object and is further operable to arrange the objects within the window according to the assigned style attributes.

15 31. The computer system of claim 27 wherein the layout builder program is further operable in response to user inputs from the input device to delete selected objects in the window and to thereafter arrange the remaining objects as a function of the defined attributes of the remaining objects.